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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,573	01/02/2002	Peter Goth Engel	2405.0144-01	5993

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EXAMINER

CHAUDHRY, SAEED T

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 11/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/032,573

Applicant(s)

ENGEL ET AL.

Examiner

Saeed T Chaudhry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Applicant's amendments and remarks filed September 2, 2003 have been acknowledged by the examiner and entered. Claims 1-9 have been canceled and claims 10-23 are pending in this application for consideration.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (c) he has abandoned the invention.
- (d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- (f) he did not himself invent the subject matter sought to be patented.
- (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Harpold.

Harpold (4,826,539) discloses a process for cleaning printing screen by pumping organic solvent from a reservoir to the screen; brushing the screen surface to be cleaned to loose the ink on the surface; drawing a vacuum on said surface via vacuum line to remove ink and solvent; and separating liquid from the gas flow (see claims and abstract). To clean a printing screen, one locates the screen in clean up tray, leaning it against light panel. One first depresses pump pedal 82, holding vacuum tool 42 over tray 60, and holds pump pedal 82 down until solvent begins

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flow out of brush attachment 42. One then simultaneously depresses pump 82 and vacuum pedal and vacuum pedal 83 while scrubbing the screen with brush attachment 42. It is helpful to occasionally release pump pedal 82 while continuing to depress vacuum pedal 83 to remove excess solvent from the screen (see col. 5, lines 51-61). Means for drawing vacuum and pumping organic solvent either independently of one another or simultaneously to thereby facilitate directing more solvent on the work surface to be cleaned initially and drawing more vacuum towards the end of the operation to facilitate final clean up (see claim 31). The reference discloses in claim 31 that vacuuming and pumping solvent are performed independently of one another, so solvent is pumped first and then solvent is vacuumed later. Therefore, claim 23 is anticipated by Harpold.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 10-13 and 15-22 are rejected under 35 U.S.C. § 103 as being unpatentable over Harpold in view of Gremminger.

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Harpold was discussed supra. However, the reference fails to disclose specific range of gas flow rate or nozzle has a rectangular shape or a length to width ratio of the rectangular nozzle.

Gremminger (4,584,736) an analogous art for vacuum cleaning discloses a process for cleaning fabric with a suction nozzle. Depending upon the particular application of the surface cleaning, the length of the suction nozzle may vary from about 3 centimeter to about 100 centimeters. The vacuum unit may comprise a conventional device such as a vacuum pump, capable of creating suction. The vacuum unit may cause a suction force equivalent to a water column of 2.8 meters to develop at the suction nozzle (see col. 3, lines 12-29). The reference discloses applying a suction nozzle directly to the cleaning surface and an almost air tight seal extending towards the front of the cleaning head is formed between the suction region of the suction nozzle and the surroundings. This increases the suction force thereby enhancing the cleaning effect (see col. 1, lines 9-20 and col. 4, lines 19-28).

It would have been obvious at the time applicant invented the claimed process for cleaning screen fabric to incorporate a rectangular shape nozzle for vacuuming solvent from the screen as disclosed by Gremminger for the purpose of covering greater area for vacuuming and for faster removal of the solvent from the screen. Gremminger discloses that depending upon the particular application of the surface cleaning apparatus, the length of the suction nozzle 4 may vary from about 3 to 100 centimeters (see col. 3, lines 19-20). Therefore, one of ordinary skill in the art would manipulate the length and width ratio for removing solvent from the screen for better and efficient results. Gremminger the vacuum unit may cause a suction force equivalent to a water column of 2.8 meters to develop at the suction nozzle (see col. 3, lines 12-29). Therefore,

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one of ordinary skill in the art would manipulate the gas flow rate on the screen and vacuum pressure for better and efficient results. Since one would expect that higher rate would remove solvent faster than the slower rate. Harpold discloses that dirty screens are cleaned by placing them in a sink, rinsing them with a solvent which will dissolve the ink, removing the screen and then flushing the solvent and ink down the drain with a stream of water (see col. 1, lines 19-22). Therefore, one of ordinary skill in the art would rinse the solvent with water to remove the solvent from the screen.

Claim 14 is rejected under 35 U.S.C. § 103 as being unpatentable over Harpold in view of Renholt.

Harpold was discussed supra. However, the reference fails to disclose vacuum is driven by a compressed air.

Renholt (3,971,096) discloses A series of types of compressed air-driven suction devices, most often termed ejector vacuum cleaners, is previously known and intended for use in strongly contaminated localities as for instance in process plants, shipyards, engine rooms etc. Vacuum cleaners are usually driven by electricity, with resulting heavy weight and complicated equipment necessary produce the suction effect. In cases where a particular strong suction effect has been needed, it has also been suggested, as indicated above, to use pressurized air-driven ejector vacuum cleaners for the purpose (see col. 1, lines 5-15).

It would have been obvious at the time applicant invented the claimed process to utilize a compressed air driven suction device as disclosed by Renholt in the process of Harpold for the purpose of strong suction effect.

Response to Applicant's Arguments

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Applicant argued that Harpold fails to disclose or suggest the instant recited first cleaning step conducted without applying suction to the screen fabric. Harpold further fails to disclose or suggest the instant recited removal, after the first cleaning step is completed, of cleaning liquid remaining on the clean screen fabric by moving a suction nozzle across the clean screen fabric to suck off and entrain cleaning liquid remaining on the fabric.

This argument is not persuasive because Harpold clearly disclose the steps as recited in the claim 23. Harpold disclosed in the claim 31 that “means for drawing and pumping said organic solvent either independently of one another or simultaneously to thereby facilitate directing more solvent on the work surface to be cleaned initially and drawing more vacuum towards the end of the operation to facilitate final clean up”. Therefore, Harpold suggested to first clean with solvent and then removing solvent and loosened ink by vacuum. Therefore, Harpold anticipate the claimed process.

The applicant argued that Germminger has the same deficiencies as Harpold and the combined teachings of the references would not suggest applicant’s claimed invention to one of ordinary skill in the art.

This argument is not persuasive because Germminger was cited to show the rectangular suction nozzle and for suction force.

The applicant argued that both the references disclose an electric motor for driving the suction device, and neither of the reference relied upon disclose the use of a compressed-air driven suction device.

This argument is deemed to be moot in view of the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (703) 308-3319. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 5:00 P.M.

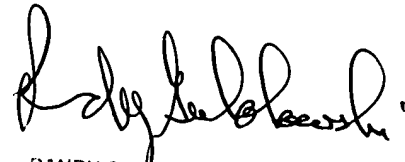
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Randy Gulakowski, can be reached on (703)-308-4333. The fax phone number for non-final is (703)-872-9310 and for after final is 703-872-9311.

When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.

*Saeed T. Chaudhry
Patent Examiner
November 12, 2003*



RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700